

Melioidosis

What is melioidosis?

Melioidosis, also known as Whitmore's disease, is an uncommon bacterial infection caused by *Burkholderia pseudomallei*. The disease affects humans and animals. Individuals acquire the bacteria through direct contact with contaminated soil and surface waters.

Who gets melioidosis?

Melioidosis is a rare disease in the United States, but it is more common in tropical or subtropical areas of the world, including Southeast Asia, Africa, and Australia. People who get melioidosis include agricultural workers, military personnel, travelers to areas where the disease is common, construction workers, and people who have contact with contaminated soil or water. Individuals with underlying diseases, such as diabetes mellitus, kidney or liver disease, chronic lung disease, thalassemia (a form of anemia), cancer or another immune-compromising condition, are at higher risk for developing the infection.

How is melioidosis spread?

The bacteria that cause melioidosis usually enter the body through inhalation of soil dust, breaks in the skin, or occasionally by ingestion. Person-to-person transmission is rare, but may occur through contact with blood and body fluids of an infected person. Laboratory-acquired infections are rare, but may occur, especially if procedures produce aerosols.

What are the symptoms of melioidosis?

The bacteria can infect the skin or lungs or can spread throughout the body. The signs and symptoms that a person may develop depend on the location of infection. Some infected persons may not develop any symptoms. Localized infections, such as skin wounds, are characterized by pain or swelling at a particular site, fever, ulceration, or abscess. Symptoms of lung infection include cough, chest pain, fever, headache, or anorexia. When the bacteria enter the bloodstream, signs and symptoms include fever, headache, respiratory difficulties, abdominal pain or discomfort, joint pain, muscle tenderness, or disorientation. When the bacteria are spread throughout the body (disseminated infection), symptoms include fever, weight loss, stomach or chest pain, muscle or joint pain, headache, and seizures.

How soon after exposure do symptoms appear?

The time between exposure and development of signs and symptoms varies. Usually, symptoms appear two to four weeks after exposure, but can occur from one day to many years after exposure.

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When and for how long can an infected person spread the disease?

Person-to-person spread of the bacteria can occur with exposure to blood or body fluids of an infected person, but this is rare.

How is melioidosis diagnosed?

Melioidosis is diagnosed by isolating the bacteria from clinical specimens (e.g., blood, urine, skin lesions, throat swab) or identifying increases in antibodies in the blood.

What is the treatment for melioidosis?

Melioidosis can be treated with long courses of antibiotics. Relapses may be seen in patients, especially those who do not complete a full course of the recommended therapy.

How can melioidosis be prevented?

Persons with underlying conditions, including diabetes mellitus and traumatic wounds, should avoid exposure to soil or water in areas where the disease is more common. Laboratory workers handling infectious material should follow appropriate safety procedures and use personal protective equipment.

How can I get more information about melioidosis?

- 1) If you have concerns about melioidosis, contact your healthcare provider.
- 2) Call your local health department. A directory of local health departments is located at <http://www.vdh.virginia.gov/LHD/index.htm>.
- 3) Visit the Centers for Disease Control and Prevention website at <http://www.cdc.gov/melioidosis/index.html>.